

in honor of Josiah Otis Swift (1870--), well-known naturalist, founder of the Yosian Brotherhood which in the past quarter of a century has brought the beauties of the great out-of-doors to over 150,000 Americans, chiefly in the vicinity of New York City, and author of the daily column "News Outside the Door" which has popularized Nature-study among millions of newspaper readers.

NOTES ON SOUTH AMERICAN MELASTOMES

H. A. Gleason

The genus Centradenia, with seven known species, has always been considered endemic to Central America, ranging from Panama to southern Mexico. Haught has recently collected plants along the western coast of Colombia which, although bearing only immature flowers, undoubtedly represent C. Maxoniana Gl. So far as known to me, this is the first collection from the South American continent, and leaves Heterocentron the only endemic genus of the family in Central America.

Haught has also collected in Colombia plants of Miconia barbicaulis Gl. which exactly match the type specimen. The species was originally described from the eastern slope of the Andes in Ecuador. Haught's collection was made on the western slope of the mountains and approximately four hundred miles north of the type locality.

CALYPTRELLA STELLATA Gl., sp. nov. A speciebus sex differt petalis subrotundis nec acutis nec acuminatis; a C. littorali Gl. differt floribus 5-meris magnis foliis 5-nerviis; a C. denticulata Gl. differt foliis et hypanthiis stellato-tomentosis atque longe villosis, floribus majoribus, dentibus calycis exterioribus multo majoribus 2.5 mm. longis.

A large shrub or small tree with clear red flowers. Younger stem densely villous with short crowded hairs. Leaves obovate-oblong, 5-nerved, entire, abruptly short-acuminate, obtuse or rounded at base, glabrous above, densely white-stellate-tomentose beneath and also villous with pale brown hairs. Hypanthium densely stellate and also villous, 8 mm. long to the torus. Calyx 4.5--5 mm. long, irregularly ruptured at anthesis, usually into 3 lobes, pubescent like the hypanthium but with shorter hair; exterior teeth triangular, 2.5 mm. long. Petals rotund-obovate, 13 mm. long and wide. Filaments 8.5 mm. long; anthers 11.6 mm. long, tangentially flattened, the stout connective prolonged 2 mm. to the filament and terminating in an obscure

obtuse basal spur.

Type, Espinosa 1544, in the herbarium of the New York Botanical Garden, collected at Huilaco, near Loja, Ecuador, alt. 2250 meters.

A key to the eight species of Calyptrella then known was published in Phytologia 2: 301 in 1947. Our plant traces through the key directly to C. denticulata, also from Ecuador, but differs from it conspicuously in certain characters not mentioned in the key. In C. denticulata, the pubescence of the leaves and the hypanthium is restricted to stellate hairs, lacking the long simple ones, the leaves are narrowed to the base, the hypanthium and calyx are only half as large, the exterior teeth are merely minute points, the petals and stamens are considerably smaller.

CONOSTEGIA HAUGHTII Gl., sp. nov. Frutex 1.5 m. altus, ramis folisque juvenilibus arctissime furfuraceis mox glabrescentibus. Folia membranacea, elliptico-oblancoolata vel oblanceolata, usque ad 22 cm. longa 7.5 cm. lata, acuminata ad apicem obtusum, integra, basi longe cuneata fere ad caulem, petiolo libero tantum 2--3 mm. longo, valde 5-ple-nervia, subtus pallida. Panicula laxa pauciflora, 4--6 cm. longa. Flores 5-meri in cymulis 3-floris terminalibus. Alabastrum obovoideum, obtusum, 3.5 mm. longum, tenuissime furfuraceum; hypanthium 2.2 mm. longum. Petala alba, ovata, obtusa, equilatera, 3.2 mm. longa, 1.9 mm. lata. Stamina 10, isomorpha; filamenta leviter complanata, 1.5 mm. longa; antherae oblongae, 1.5 mm. longae; connectivum simplex. Ovarium inferum; stylus gracilis, 4.7 mm. longus; stigmae fere punctiformi.

Type, Haught 4939, collected at Quebrado Isaias, east of Turbo, Dep't. Antioquia, Colombia, altitude about 50 meters, in the herbarium of the New York Botanical Garden. The species stands out sharply from the other Colombian plants of the genus by its apparently glabrous foliage, strongly 5-ple-veined leaves, and small few-flowered cymes.

MICONIA MEDUSA Gl., sp. nov. Sect. Cremanium. Frutex; rami graciles, petioli, et foliorum pagina inferiore tomentosi, pilis elongatis contortis parce ramosis. Folia longe petiolata, membranacea, oblongo-oblancoolata, breviter acuminata, spinuloso-ciliata (dentibus adscendentibus, 0.5 mm. longis), 3-nervia, supra glabra. Panicula terminalis, valde reducta, non vel vix ramosa, 2--5 cm. longa. Flores 5-meri ad nodos sessiles fasciculati. Hypanthium poculiforme, glabrum. Calyx ad anthesin in lobos 5 triangulares hyalinos 0.4--0.5 mm. longos ruptus; dentes exteriores triangulares, erecti, 0.2 mm. longi. Petala alba, fere orbicularia, 1.25 mm. longa. Filamenta 1.6 mm. longa, ultra medium geniculata. Antherae oblongae, 0.8 mm. longae, poris 2 latis ventro-terminalibus dehiscentes. Ovarium

inferum, (?) 3-loculare. Stylus rectus, 3 mm. longus, apicem versus clavatus ad stigma rotundatum.

Type, Espinosa 1559, collected 5 km. southeast of Loja, Ecuador, alt. 2300--2400 meters, in the herbarium of the New York Botanical Garden.

There is no doubt that this plant finds its nearest relative in the Peruvian M. aprica Gl., in which the minute flowers are similarly congested and the pubescence is irregularly branched. It differs from our plant in its much wider and thicker leaves, scabrous above, with shorter and sparser tomentum and larger spinulose teeth, in the well developed branched panicle, the much larger anthers, and the prolonged connective.

PACHYDESMIA Gl., gen. nov.

Among the Haught collection is another melastome which displays such remarkable differences from all other members of the family known to me that I am constrained to describe it as a new genus.

Caulis circum basin petioli valde expansus. Panicula trichotoma, axi centrali non evoluto et panicula corymbiformi. Ovarii summum ad parietam hypanthii connexum per membranas 10 radiatim divergentas. Connectivum antherae valde dilatatum et thecas ubique excedens, sursum in lobum unum rotundatum vel truncatum, deorsum in lobos 2 rotundatos. Thecae antherae parvae, in medio connectivi affixae et vix elevatae, sursum in partem sterilem divergentem breviter productae, late poculiforme, poro magno terminali dehiscentem.

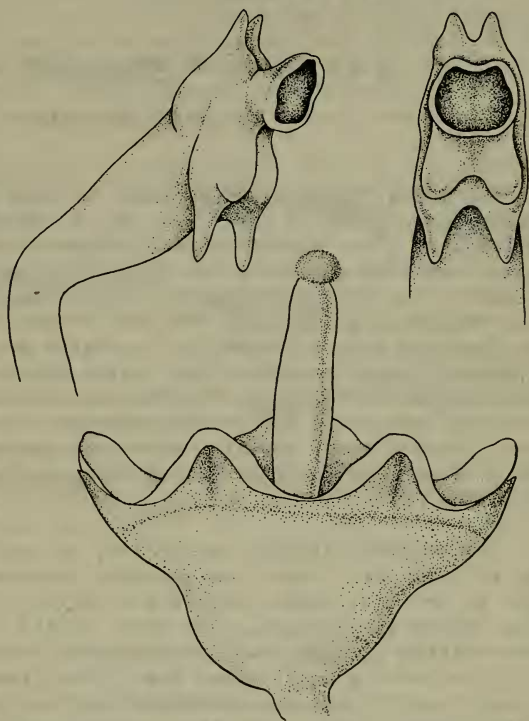
PACHYDESMIA HAUGHTII Gl., sp. nov. Frutex 1 m. altus, caule ramoso, sparse furfuraceo. Fetioli 8--12 mm. longi. Laminae elliptico-ovatae, usque ad 120 mm. longae 57 mm. latae, subacuminatae, ciliatae (ciliis spinulosis 1--2 mm. longis), basi late rotundatae, 3-nerviae, supra glabrae, subtus sparse furfuraceae secus venas primarias. Panicula fere 1 dm. longa lataque. Hypanthium late campanulatum, 1.5 mm. longum ad torum, 3 mm. in diametro, minutissime furfuraceum. Calycis tubus 0.5 mm. productus, sinus late rotundatis; lobi obtuse triangulares, 1 mm. longi, minute eroso-ciliati; dentes exteriores adnati, triangulares. Petala alba, late elliptica, 4.3 mm. longa, inequilatera. Stamina 10. Filamenta ca. 4 mm. longa, supra medium geniculata, ad apicem valde dilatata. Connectivum 2 mm. longum, in ser. staminum exteriore apice truncatum, in ser. interiore ovatum obtusum. Thecae vix elevatum, poro divergente 0.8 mm. in diametro dehiscentes.

Type, Haught 5201, collected west of Tambo, on the west slope of the Cordillera Occidental, Dep't. Cauca, Colombia, altitude 2200 meters, in wet forest.

The peculiar features of the plant are summarized in the

generic diagnosis. The spathe-like expansion of the stem about the base of the petioles is known also in four species of Miconia, M. scutata, annularis, stipularis, and manicata. A corymbiform panicle

very rarely appears in the genus. The connection of the ovary-summit with the wall of the hypanthium has not been observed by me in the Miconieae: it consists of ten thin radiating membranes extending from the very summit of the ovary to the wall of the hypanthium as far as the torus, and dividing the cavity into as many chambers each of which is in the bud occupied by an anther. The remarkably large connective extends well below the minute thecae, which is common in many species of Melastomes, and also well beyond the thecae, a condition which I



Front and side view of anther; hypanthium, calyx, and style. x 8.3

have not noted elsewhere in the family. The two thecae are small and tangentially flattened. Before dehiscence, as seen in an unopened flower-bud, they are slightly distended; after dehiscence they are scarcely elevated above the surface of the connective. At the upper end of the thecae the broadly cup-shaped sterile portion diverges at right angles from the connective and terminates in a large pore. The total length of the thecae, including the pore, is about half that of the connective.

In general aspect and in most technical characters the plant suggests Miconia, to which it must be related, but it differs so greatly in its anthers from every species known to me that

it can not be associated with any of them, nor assigned to any of the eleven sections of the genus.

A NEW SPECIES OF PTYCHOCARPUS FROM PERU

Joseph V. Monachino

The genus Ptychocarpus Kuhlmann belongs in the tribe Casearieae (Benth. & Hook. Gen. Pl. 1: 795; Engl. & Prantl Pflanzenf. 3^{6a}: 46). It is easily distinguished at sight from other American genera in the Flacourtiaceae by its inflorescence habit. P. apodanthus, the only hitherto known species, was reported as seemingly frequent in the state of Pará, Brazil; it has also been collected in the Matto Grosso (Krukoff 1342; Tabajaza, upper Machado River, terra firma; November 13, 1931; distributed as "Ferebea ?"). The simple, clearly defined position of this genus and species made it an easy matter to recognize the following novelty, which was chanced upon among a set of unidentified specimens filed as Sapotaceae at the New York Botanical Garden.

PTYCHOCARPUS KILLIPII Monachino, sp. nov. Arbor glaber 6--8 m. altus; petiolis 4--6 mm. longis; laminis ca. 15--20 cm. longis et 4--7 cm. latis punctatis oblongo-oblancheolatis, ad apicem cuspidato-acuminatis, ad basin acutis, nerviis primariis lateralibus utroque ca. 12 distantibus adscendentibus arcuatis; inflorescentiis axillaribus sessilibus glomeratis ca. 8 mm. longis paucifloris dense bracteatis; floribus masculis: perianthio urceolato ca. 6 mm. longo intus prope basin dense piloso, caeterum glabro, lobis 4 imbricatis ovatis ca. 1.5 mm. longis; staminibus 8, filamentis ligulatis ca. 1.5 mm. longis et 0.5 mm. latis.

Glabrous tree 6--8 m. tall; stipules caducous; leaves alternate, the petioles 4--6 mm. long, thick, the blades about 15--20 cm. long and 4--7 cm. broad, closely translucent-punctate, oblong-oblancheolate, abruptly cuspidate-acuminate, narrowed and acute at base, faintly serrulate on the upper margins, the principal lateral nerves about 12 pairs, widely spaced and clearly ascending-arcuate, connected near the margins of the blade, the reticulation loose, a little raised on the underside of the blade; inflorescences closely resembling those of P. apodanthus, axillary, sessile, glomerate, about 8 mm. long, few-flowered, densely bracteate, the bracts overlapping so as to impart a strobile-like appearance to the inflorescences, orbicular to oblong, up to 6 mm. long and 3 mm. broad, flat to